

CHAPTER 58

CAPITAL ASSETS

A. CAPITAL INVESTMENT PROGRAM

1. General Information. General information on capital assets may be found in Chapter 6, "Fixed Assets," Volume 4 of this regulation.
2. Purpose. This chapter provides guidance on the Capital Investment Program for the Defense Working Capital Fund (DWCF) and prescribes the accounting principles and policy that shall be followed in accounting for the Capital Investment Program.
3. Overview
 - a. The primary goal of the Capital Investment Program within the DWCF is to establish a capability for reinvestment in the infrastructure of business areas in order to facilitate mid and long term cost reductions. The objective is to improve product and service quality and timeliness, reduce costs and foster comparable and competitive business operations. The Capital Investment Program provides the framework for planning, coordinating, and controlling DWCF resources and expenditures to obtain capital assets.
 - b. This policy applies to all activities, or groups of activities, within the Department of the Army, Department of the Navy, Department of the Air Force, or a Defense Agency chartered under the DWCF.

B. POLICY

1. Managers at DWCF activities shall identify, prioritize, justify, and budget for capital asset purchases.
2. The capital investment program shall be carried out within the guidelines established by public law, DoD policies, and other regulatory constraints.
3. Only those capital investment projects that have been included in a President's budget for the DoD Component may be financed through the Capital Investment Program except that, under certain circumstances, as prescribed in paragraph C.5., during the year of execution, substitutions may be made for projects when operational necessity warrants.
4. The Capital Investment Program shall not be used to establish an in-house capability for operations that are more economically available through commercial contract except as permitted under OMB Circular A-76, "Performance of Commercial Activities."
5. All capital assets developed, manufactured or otherwise procured by a activity for use of that activity shall be funded through the DWCF capital budget, except those capital assets identified in paragraph D.5. below.
6. DWCF reimbursement rates shall include an amount estimated, considering the expected workload, to be sufficient to fund the approved Capital Investment Program.

7. Projects that meet the DoD investment capitalization threshold, both as to cost and useful life, must be:

- a. capitalized and depreciated,
- b. funded as part of the capital budget, and
- c. accommodated within approved capital budget authority limits.

8. Projects that meet the DoD investment capitalization threshold also reduce the available capital budget authority.

9. Projects that fail to meet the DoD investment capitalization threshold shall be funded as an operating expense.

10. Each DoD Component will develop procedures to ensure that:

- a. Capital investment funds are used only for approved projects.
- b. Every attempt is made to effect timely installation and to realize productivity improvements estimated in budget submissions.

11. Management improvement initiatives shall be expensed as provided in Chapter 62, paragraph E.2. unless specifically directed otherwise by the Under Secretary of Defense (Comptroller).

C. CAPITAL INVESTMENT PROGRAM REQUIREMENTS

1. Each proposed acquisition of a capital investment shall be documented and reviewed to ensure that the asset satisfies all of the following criteria:

- a. Is more economically feasible to purchase than to lease.
- b. Meets the Department's long-range planning and programming objectives as identified in long range strategic plans.
- c. Results in satisfying a documented need that cannot be met as effectively and efficiently by existing equipment and facilities.
- d. Complies with DoD Directive 4275.5, "Acquisition and Management of Industrial Resources" and DoD Directive 4270.4, "Unspecified Minor Construction, Emergency Construction, and Restoration of Damaged or Destroyed Facilities," as well as, other applicable policies and regulations governing the lease and acquisition of equipment and facilities.
- e. includes workload projections that take into account the results of interservice decisions, workload posture planning decisions, readily available commercial alternatives, and other reasonable options for accomplishing workload.
- f. Accomplishes the objective for which the capital asset is justified. The criteria should include, but is not limited to: improved efficiency (savings) or effectiveness; required new capability and capacity that cannot be met with current equipment or facilities; replacement of unsafe, beyond economical repair, or inoperative and unusable capital assets; and mandated

environmental, hazard waste reduction, or regulatory agency (state, local or Federal) requirements.

g. Meets or exceeds the DoD capitalization criteria.

h. includes, as appropriate, a pre-investment cost or economic analysis that identifies the reasons and associated expected benefits of the purchase in accordance with the requirements at paragraph F. of this chapter for an analysis for DWCF capital investments. An economic analysis must be completed prior to requesting a capital asset be included (1) in the Office of the Secretary of Defense (OSD) budget submission, (2) in the President's Budget submission, or (3) in any request for substitution or reprogramming involving a capital project.

2. A post-investment analysis, as required by paragraph F.10. of this chapter, will be prepared annually by each DoD Component in accordance with the requirements for an economic analysis for DWCF capital investments.

3. Documentation supporting capital investment projects requests shall be prepared in accordance with the requirements in paragraph F. of this chapter for an economic analysis for DWCF capital investments. The economic analysis and the post-investment analysis documentation will be retained and remain available for review, audit or evaluation for five years after the capital asset is placed in use.

4. Capital Investment Limitations

a. When a request for capital investment is granted, the capital budget section of the Annual Operating Budget (AOB) will designate the maximum amount of funds that may be committed and obligated for capital investments.

b. With the exception of those capital assets identified in paragraph D.5. below, capital investments will be limited to the capital budget amount approved in the AOB.

c. The AOB will list separately each capital project with costs that are estimated to be equal to, or greater than \$500,000. Projects estimated to cost less than \$500,000 will not be listed separately on the AOB, but the AOB will identify, by category--minor construction, equipment, automated data processing equipment (ADPE), and software, the total amount approved for all such projects. Approved funding limits for capital budget obligations will be provided as dollar value limitations within program year, and for all program years available for execution in the fiscal year that the AOB is issued. A DWCF activity may purchase, develop, manufacture, construct, or otherwise acquire approved capital assets only to the extent that amounts are authorized on an approved AOB. The DoD Components will list all approved capital projects in AOBs subsequently issued to subordinate commands and activities.

d. Section 342, "Capital Asset Subaccount," of the National Defense Authorization Act for Fiscal Year 1993 (Public Law 102-484) provides that "The Secretary of Defense may award contracts for capital assets of the DWCF in advance of the availability of funds in the subaccount, to the extent provided for in appropriations Acts." That legislative provision made contract authority available for the DWCF Capital Investment Program. Contract authority is statutory authority that permits obligations to be incurred in anticipation of receipts to be credited to the DWCF. By definition, contract authority is unfunded and must subsequently be funded through the collection of amounts for goods and services sold to customers before obligations incurred under the contract authority can be liquidated.

e. Dollar value limitations for capital budget obligations are provided on the approved AOB by program year. The AOB limitation by program year is subject to Title 31, United States Code, Section 1341, "Limitations on Expending and Obligating Amounts," and Section 1517, "Prohibited Obligations and Expenditures." Exceeding the limitation contained in the capital budget section of the AOB can result in an Antideficiency Act violation.

5. Reprogramming

a. Budget formulation and congressional reviews require a firm, annual program consisting of specific, justified projects to support the Capital Investment Program. Only those capital asset projects that have been approved by Office of the Under Secretary of Defense (Comptroller) (OUSD(C)) will be included in the President's Budget. However, in the year of execution, actual investment requirements can change relative to previously approved projects and funding levels. Accordingly, appropriate reprioritizing and substitutions are permitted in accordance with provisions of this chapter.

b. Approved capital investment projects and associated dollar amounts will be reflected in the AOB by program year. Substitutions and additions of capital projects must comply with the requirements in paragraph C.1. All capital projects that are canceled or postponed, as well as added projects, adjustments in estimates to approved projects, and projects selected as substitutions or replacements for canceled or postponed projects must be identified in capital budget requests forwarded to the OUSD(C).

c. An economic analysis must be completed for all additional, substitute or replacement projects before reprogramming approval is requested. The economic analysis should be prepared in accordance with the requirements in paragraph F. of this chapter for an economic analysis for DWCF capital investments.

d. No project should be continued solely because it was previously approved or because funds are available.

e. The following approval levels and dollar threshold apply to changes to projects approved in the Capital Budget section of the AOB including reprogrammings, substitutions, cancellations and additions:

(1) All adjustments or changes to capital projects that are equal to, or greater than \$500,000 shall be approved by the OUSD(C).

(2) All adjustments or changes between categories of capital projects (i.e. minor construction, equipment, ADPE, and software) or business areas that increase a category or a business area by a cumulative amount equal to, or greater than \$500,000 within a program year shall be approved by the OUSD(C).

(3) The DoD Components shall develop and issue internal written policies to establish approval levels and dollar thresholds for adjustments or changes to capital projects, or between categories of capital projects approved in the AOB including reprogrammings, substitutions, cancellations and additions.

6. Financing

a. The Capital Investment Program is financed by resources of the DWCF. Funds for this purpose are accumulated in the corpus through the inclusion in customer rates of expected

depreciation on purchased capital assets and, if applicable, any additional capital surcharge needed to meet the capital needs of the DWCF.

b. Section 342 of the National Defense Authorization Act For Fiscal Year 1993 requires DoD to establish a capital asset subaccount. Account 1011.1, "Funds Collected - Operating Program - DWCF," and account 1011.2, "Funds Collected - Capital Program - DWCF," are established to separately identify collections applicable to the operating program and capital program to comply with section 342. Additionally, account 1012.1, "Funds Disbursed - Operating Program - DWCF," and account 1012.2, "Funds Disbursed - Capital Program - DWCF," are established to separately identify disbursements applicable to the operating program and capital program.

c. To avoid an Antideficiency Act violation, cash disbursements should not be made in excess of the total cash available to a DWCF activity, business area, DoD Component, or the total cash available to the DWCF.

D. CAPITAL INVESTMENTS

1. Capital Equipment, other than Automated Data Processing Equipment (ADPE) and Telecommunications. The development, manufacture, transfer, and acquisition of all capital assets for the primary use or benefit of DWCF activities shall be classified as capital investments. A capital investment purchase may be established for any purpose approved by the OUSD(C).

2. ADPE and Telecommunications Equipment. As defined in Office of Management and Budget (OMB) Circular A-11, "Preparation and Submission of Budget Estimates," ADPE and telecommunications equipment is equipment or an interconnected system or subsystem of equipment used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information.

3. Software. As defined in OMB Circular A-11, software includes system programs, application programs, commercial-off-the-shelf (COTS) software, independent subroutines, data bases, and software documentation. This category includes software development or acquisition for the general benefit of the DWCF activity but does not include software developed or acquired for a specific customer. Software developed or acquired for a specific customer should be charged to and reimbursed by the requesting customer.

4. Minor Construction. A minor construction project includes all work and costs necessary to construct or improve a complete and usable building, structure, or other real property. Minor construction projects which meet or exceed the DoD capitalization criteria but do not exceed the amount specified by 10 U.S.C. 2805 for funding such projects in the Military Construction appropriation shall be financed as a capital purchase.

5. Exclusions From the Capital Investment Program. The following are mandatory exclusions from the Capital Investment Program and must be financed directly from appropriated funds:

a. Major range and test facility items (equipment and minor construction) that meet the DoD investment capitalization criteria for use by Major Range and Test Facility Bases operating within the DWCF.

b. Military and tenant support functions.

c. Aircraft, ships, barges, and general-purpose passenger-type vehicles.

d. Equipment and minor construction projects purchased to meet mobilization requirements, but not used during peacetime operations.

e. Equipment initially procured and usually furnished as part of a weapon system and/or support system to include initial common support equipment for depot maintenance in support of new weapon systems.

f. Equipment normally funded by appropriated funds and provided to contractors as Government-furnished equipment to be incorporated into, used in conjunction with, or consumed in the production of, an end product. (Such equipment should be funded by appropriated funds and provided to the applicable DWCF activity at no cost to the DWCF activity.).

g. Minor construction projects for a non-DWCF activity or a military support function.

h. Construction and facility investment projects that exceeds the amount specified by 10 U.S.C. 2805 for funding such projects in the Military Construction appropriation.

i. Environmental projects financed or submitted for funding by the Defense Environmental Restoration Account.

j. Capital investments for morale, welfare, and recreation.

k. Such other exclusions as may be approved by the OUSD(C).

6. Capitalization Criteria

a. DoD Components shall capitalize and report in financial records all assets developed, manufactured, transferred, or acquired by the DWCF including computer software purchased or developed, when the following criteria are met:

(1) Acquisition cost, book value, or, when applicable, the estimated fair market value equals, or exceeds, the expense/investment funding threshold used by the Congress for appropriating DoD operating (expense) and Procurement (investment) appropriations. Transfers of capital assets shall comply with paragraph E.5.c.; and

(2) Estimated benefit period or useful life to the Department of Defense of 2 years or more.

b. Acquisition cost is the original purchase or development cost including transportation, design, installation, and other related costs necessary to put the asset in the place and form in which it shall be used.

c. Software acquisition or development cost incurred by DWCF activities (or, in absence of known amounts, a reasonable estimate thereof) for projects ordered or requested in prior years and delivered, installed, and operational after October 1, 1991 shall be capitalized by the DWCF activity if they otherwise meet the requirements of paragraph D.6.a. above.

(1) The acquisition cost criteria, in the case of computer and other systems, is applied on the basis of the cost of a complete system rather than on a unit cost of individual items

of equipment which, when aggregated, become a system. Incremental deliveries of these projects shall be capitalized if the aggregate cost meets the criteria above.

(2) Computer software that is integrated into hardware, and is necessary to operate the hardware rather than to perform an application, is capitalized as hardware.

d. When the expense/investment funding threshold changes, a capital asset capitalized within the DWCF at a previous threshold will continue to be capitalized and depreciated at the threshold at which it was originally capitalized.

7. Depreciation Criteria

a. Depreciation shall be calculated and accumulated using the straight-line method based on the capitalized amount less residual value when residual value is expected to be 10 percent or more of the acquisition cost. That is, the capitalized amount less estimated residual value shall be divided equally among accounting periods during the asset's useful life.

b. Depreciation shall commence in the month following (a) the date of receipt shown on the asset receiving document or (b) the date the asset is installed and ready for use (regardless of whether it is actually used). Depreciation shall be recorded in equal amounts each month thereafter until the asset is fully depreciated, disposed of, or otherwise transferred. If an asset remains in use longer than its estimated useful life, it shall be retained on the accounting record, at its residual value (which can be \$-0-) until its final disposition.

c. Depreciation of equipment acquired with a procurement appropriation for a mobilization requirement and facilities acquired with a military construction appropriation will be reflected on the DWCF financial statements but will not be recovered in rates. Addendum 1 to this chapter illustrates the accounting for such assets. Chapter 70 contains the fund financial reporting formats and instructions.

d. Equipment and minor construction projects purchased primarily to meet mobilization requirements will not be depreciated.

e. Any other exclusion from funded depreciation requires prior approval by the OUSD(C).

f. The following depreciation schedule established for Defense Business Operation activities shall be used:

Facilities construction projects (including minor construction)	20 Years
Equipment, other than ADPE	10 Years
ADPE and Telecommunications Equipment	5 Years
Software	5 Years

g. Methodology and Alternative Depreciation Schedules

1. DWCF activities may request an alternative methodology for computing depreciation expenses, and/or an alternative estimate of useful life. Requests for an alternative methodology for computing depreciation expenses or depreciation schedules should be submitted for a determination of approval, through the appropriate DoD Component channels, to the OUSD(C), Directorate for Accounting Policy.

2. Requests for an alternative methodology for computing depreciation expenses or depreciation schedules should identify, but should not necessarily be limited to: (1) type and function of the capital asset (2) alternative methodology for computing depreciation expenses or depreciation method proposed to be used; (3) commercial benchmark used to determine applicability or estimated useful life of the asset; and (4) rationale for the alternative. The OUSD(C), Directorate for Accounting Policy, will notify the DoD Component when a determination is made.

E. ACCOUNTING FOR CAPITAL ASSETS

1. Capital assets used by a DWCF activity in providing goods or services must be recognized in the property and financial records of that DWCF activity. Capital assets include, but are not limited to; physical plant and property, (including government owned facilities, property acquired under a capital lease, leasehold improvements to property acquired under a capital lease or an operating lease), equipment and software. Financial records for assets capitalized in a DWCF activity must:

- a. Be supported by formal depreciation schedules,
- b. Have all depreciation expenses recorded,
- c. Include depreciation expenses in rates charged, except for depreciation of facilities acquired through military construction appropriations or other exclusions approved in accordance with paragraph D.7.e. above.

2. The following three criteria must be met for an item to qualify as an asset and be reported as such in a DWCF entity's financial statements:

a. The asset must embody a probable future benefit that will contribute to the entity's operations. In applying this criteria, the concept of benefit has traditionally been referred to as "service capacity" which is the ability of an item to directly assist an entity in achieving its mission. Service capacity has value because it is consumable or exchangeable for other benefits. Real property assets (e.g., buildings) financed by a military construction appropriation provide a service capacity to the DWCF in that they house DWCF operations thus allowing the DWCF activity to achieve its mission. Also, DWCF is responsible for assuring that the maximum benefit is always available since it pays for utilities, maintenance, and upkeep. The exchangeability part of the benefit criteria (the ability to sell, trade, or donate property) need not be present for an item to qualify as an asset in the federal sector if consumption of the item provides benefit to the entity.

b. The entity that reports the asset must be able to obtain the benefit and control access to the benefit inherent in the asset. The second criteria of an asset, control over the benefit, refers to an entity's ability to direct who derives the benefit, the timing of when the benefit is derived, and under what conditions it is derived. Directing the use of the benefit has traditionally been based on (1) possession or (2) the ability to exert significant influence over the benefits; either of which is obtained through legal ownership or an agreement with the owner. In instances in which a DWCF activity maintains possession of property through agreements which provide for DWCF's possession for as long as needed, without a termination date and without reimbursement, such arrangements are generally considered as providing sufficient influence over the use of the property to satisfy the control criteria. Once termination occurs, however, as in the case of a base closing where DWCF conducts operations, control no longer exists; hence, the property will no longer meet the control criteria of an asset.

c. The transaction or event giving the entity a right to and control over the benefit must have already occurred. The third criteria, is an agreement (express or implied) that allows DWCF to occupy and/or use property without reimbursement for as long as needed.

3. DWCF activities that meet the criteria in paragraph E.2. above shall record the capital asset in their property and financial records; record depreciation on the capital asset; and record improvements to the capital asset.

4. Facilities Used by DWCF Activities

a. DWCF activities that are sole occupants/tenants of a government owned facility or hold a capital lease (as opposed to an operating lease) on an entire building and sublet portions of that building and meet the criteria in paragraph E.2. above shall record the capital asset in their property and financial records.

b. DWCF activities which are joint occupants/tenants of a Government owned facility and meet the criteria in paragraph E.2. above shall determine which occupant/tenant will record the capital asset in their property and financial records by applying the following criteria in descending order of application:

(1) Occupant/tenant that can substantiate preponderant use (via direct labor hours, actual hours, population, square footage, metered output, etc.) of an asset in the production of goods or services for their customers.

(2) Occupant/tenant that have exclusive responsibility for the maintenance, repair, upkeep, and replacement (Military Construction) of the asset.

5. Assets Held by DWCF Activities for Mobilization Requirements. DWCF activities shall assume ownership of assets acquired through use of a procurement appropriation that are held to meet a mobilization surge capability.

6. Sources of Capital Assets. Subject to availability of sufficient resources and compliance with other DoD/Federal requirements, capital assets may be developed, manufactured, transferred, or otherwise procured for use by DWCF activities upon identification in, and approval of, the capital budget section of an activity's AOB. Regardless of the ultimate use of the asset, costs incurred in the development, manufacture, or acquisition of the asset must be identified, captured, and recorded as execution against a specific Capital Budget project.

a. Acquisition of Capital Assets for Business Area Use. The total cost incurred by a DWCF activity to develop, manufacture or acquire a capital asset consists of, but is not limited to; direct and indirect labor and non-labor, contractual cost net of authorized discounts paid; reimbursable support cost, applicable overhead, and general and administrative costs incurred when appropriate; plus any associated costs for transportation, installation, and other related costs necessary to put the asset in the place and in the form in which it shall be used. Software development (programs, routines, and subroutines) cost also shall include the computer operating costs for testing, developing, and parallel processing.

b. Capital Assets Centrally Acquired

(1) Business areas, such as the Joint Logistics Systems Center, may from time to time be designated as a central agent to procure capital assets for customers within the DWCF. The procuring business area shall issue contracts to commercial sources or funded orders to other DWCF activities and DoD Components as necessary, to satisfy the requirement.

(2) Capital assets may be sold or transferred to customers of the central agent at negotiated selling or transfer prices. Negotiated selling or transfer prices shall include the total cost of the capital asset which consists of contractual cost net of discounts taken, reimbursable support cost, applicable overhead, general and administrative costs incurred in the acquisition of the asset plus any approved surcharges.

(3) A capital asset acquired by a central agent and distributed and installed in one or more business areas shall be capitalized in the financial records of each business area and depreciated.

(4) When the share of the cost of a capital asset distributed and installed at a business area fails to meet the investment capitalization criteria, it nevertheless shall be capitalized and depreciated if the aggregate initial cost of the asset distributed to all business areas, satisfies the investment threshold.

(5) Capital assets acquired by a central agent may be delivered directly from a vendor/contractor to the receiving business area. Central agents shall record all deliveries and receipt of capital assets in their financial records until such time as an order is completed and sold or transferred to a customer. The ultimate cost of the completed asset shall include all incremental deliveries and all additional costs incurred by either, or both, the central agent and the receiving customer in the acquisition and installation of the asset.

c. Transfer of Capital Assets

(1) Capital assets that are transferred to a DWCF activity and have preexisting depreciation schedules and accumulated depreciation shall be capitalized to the fund at their book value plus any associated costs for transportation, installation, and other related costs necessary to put the asset in the place and in the form in which it shall be used.

(2) Capital assets that are transferred to a DWCF activity and have no preexisting depreciation schedules and accumulated depreciation shall be capitalized to the fund at their original acquisition cost, or reasonable estimate thereof when acquisition cost cannot be reasonably determined, plus any associated costs for transportation, installation, and other related costs necessary to put the asset in the place and in the form in which it shall be used. The DWCF activity shall then record accumulated depreciation in an amount equal to the amount that would have been recorded if the asset had been depreciated based on its (the DWCF activity's) normal depreciation policy. The net value (original acquisition cost less accumulated depreciation) shall be recorded as an equity increase. For example, assume an asset that was originally acquired by the transferor three years past for \$50,000 is transferred to a DWCF activity. The asset is one that has a five year useful life. The following accounting entry should be made to record the asset on the records of a DWCF activity:

Dr 1750 Equipment	\$50,000	
Cr 1759 Accumulated Depreciation on Equipment		\$30,000
Cr 3220 Transfers In from Others Without Reimbursement		\$20,000

Entry to record transfer in of an asset without reimbursement from another DoD entity.

Depreciation after the transfer shall be calculated based on the net asset amount recorded. The DWCF will then begin recording depreciation expenses on these assets and reporting them in the financial records.

(3) Capital assets that (1) are donated to a DWCF activity by organizations outside the DoD and (2) meet the capitalization criteria shall be capitalized to the DWCF at estimated fair market value plus any associated costs for transportation, installation, and other related costs necessary to put the asset in the place and in the form in which it shall be used. Depreciation of the donated asset shall be calculated based on the asset amount recorded. The DWCF will then begin recording depreciation expenses on these assets and reporting them in the financial records.

(4) Capital assets that are transferred out of a DWCF activity to another DoD activity, Government Agency or others shall be transferred at the recorded acquisition cost less accumulated depreciation as of the date of transfer. The accounting entries for these transfers are prescribed in paragraph E.6.b. below. Disposal of a capital asset--whether at a gain or a loss--shall be in accordance with Chapter 62 of this Volume and Part of the DoD Financial Management Regulation.

d. Capital Assets Acquired for Customers

(1) Statutory limitations and restrictions imposed on appropriated or other funds of the DWCF's customer(s) are not changed by the placement of an order with the DWCF. A DWCF customer cannot use its appropriated funds to do indirectly, i.e., through placement of an order with a DWCF activity, what it is not permitted to do directly. Thus, the availability of an appropriation cannot be expanded or otherwise changed by placing a customer order with, or otherwise transferring amounts to the DWCF. Appropriated funds cited on reimbursable orders are available only for the purposes permissible under the source appropriation and remain subject to the same restrictions. The ordering activity is primarily responsible for the determination of the applicability of the ordering appropriation. However, if instances arise where the ordering appropriation is not appropriate for the purpose provided, then the order should be returned with a request for an appropriate appropriation cite.

(2) Capital assets which are acquired specifically for a particular customer order and do not have a recurring use for other workload or customer orders shall be charged to the customer order, provided the appropriation or fund cited in the order is appropriate for that purpose. Such assets shall be the property of the customer and, as such, are not subject to depreciation expense recovery by a DWCF activity.

(3) The total cost incurred by a DWCF activity in developing, manufacturing or acquiring capital assets for a customer shall be accumulated in the work-in-process account. Customers shall be billed the negotiated sales price. The selling price shall include the total cost of the capital asset which consists of contractual cost net of authorized discounts taken, reimbursable support cost, applicable overhead, general and administrative costs when appropriate, any associated costs for installation, modification, testing, transportation, and other related costs in developing or acquiring the asset, plus any approved surcharges.

7. Improvements and Upgrades of Existing Capital Assets

a. Improvements and upgrades that increase the capacity or operating efficiency of an existing capital asset, and for which the cost is equal to or greater than the expense/investment funding threshold used by the Congress for appropriating DoD operating (expense) and Procurement (investment) appropriations, should be capitalized even though the improvement or

upgrade may not extend the useful life of the asset. The depreciation schedule of existing capital assets shall be revised to include the acquisition cost of a capitalized improvement or upgrade. Below are criteria for use in determining whether the useful life of the original asset should be revised. In either situation, revision of depreciation expense and/or useful life is measured prospectively and accounted for in the current and future periods. No adjustment shall be made to prior depreciation.

(1) If the cost of the improvement or upgrade is greater than 50 percent of the net book value (original acquisition cost less accumulated depreciation) of the existing asset, then the improvement or upgrade is analogous to the purchase or manufacture of a new asset. Accordingly, investment amounts will be added to the current net book value of the existing asset and a new depreciation value computed which will depreciate the new value over the useful life of the asset determined from the month that the improvement or upgrade became operational.

(2) If the cost of the improvement or upgrade is less than 50 percent of the net book value (original acquisition cost less accumulated depreciation) of the existing asset, then the cost of the improvement or upgrade is depreciated over the remaining useful life of the existing asset.

b. Improvements and upgrades costing less than expense/investment funding threshold used by the Congress for appropriating DoD operating and Procurement appropriations are recorded as an expense even though the improvement or upgrade could extend the useful life of the asset.

8. Capital Asset Accounting Pro Forma Illustrations

a. An illustration of selected accounting entries to be recorded in a DWCF's financial records is as follows:

(1) Record Capital Budget at Component Level

Dr 4550 Internal Fund Distributions Received
Cr 4567 Unallotted Capital Authority-DWCF

Entry to record at the
Component/Agency level the capital
budget received from the DoD Level.

(2) Issue Capital Budget to Installation Level

Dr 4567 Unallotted Capital Authority-DWCF
Cr 4577 Capital Authority Issued-DWCF

Entry to record the capital budget
issued to the installation level from the
Component/Agency level.

(3) Record Capital Budget at Installation Level

Dr 4585 Capital Program-DWCF
Cr 4615 Capital Authority Available-DWCF

Entry to record the capital
budget at the installation level
received from the DoD
Component.

(4) Order Placed for Capital Equipment

Dr 4615 Capital Authority Available-DWCF
Cr 4825 Undelivered Orders-Capital-DWCF

Entry to record an obligation for the
purchase of capital equipment.

(5) Capital Asset Received

Dr 4825 Undelivered Orders-Capital-DWCF
Cr 4922 Accrued Expenditures-Unpaid-Capital-DWCF

Dr 1750 Equipment
Cr 2110 Accounts Payable

Entry to record the receipt and recognize the accounts payable for a capital asset.

(6) Payment for Capital Asset

Dr 4922 Accrued Expenditures-Unpaid- Capital-DWCF
Cr 4944 Accrued Expenditures-Paid- Capital-DWCF

Dr 2110 Accounts Payable
Cr 1012.2 Funds Disbursed-Capital Program-DWCF

Entry to record the payment for the purchase of a capital asset.

b. A DWCF activity transfers out a capital asset to another Government Agency for which depreciation has previously been recorded.

(1) Transfer-Out of Capital Asset with Recorded Depreciation to another Government Agency

Dr 3231 Transfers-Out to Government Agencies
Without Reimbursement
Dr 1759 Accumulated Depreciation on Equipment
Cr 1750 Equipment

Entry to record the transfer-out of a capital asset to another Government Agency where depreciation has previously been recorded.

(2) Transfer-Out of Capital Asset with Recorded Depreciation to Others

Dr 3232 Transfers-Out to All Others
Without Reimbursement
Dr 1759 Accumulated Depreciation on Equipment
Cr 1750 Equipment

Entry to record the transfer-out of a capital asset to others where depreciation has previously been recorded.

c. A transfer-in to a DWCF activity of a capital asset for which depreciation has previously been recorded.

Receipt of Capital Asset Transferred-In with Recorded Depreciation

Dr 1750 Equipment
Cr 1759 Accumulated Depreciation on
Equipment
Cr 3220 Transfers-In from Others Without
Reimbursement

Entry to record the transfer-in of a capital asset f
from another DoD activity where depreciation has
previously been recorded.

8. General ledger account definitions are provided in Volume 1 of the “DoD Financial Management Regulation.”

F. COST AND ECONOMIC ANALYSIS OF DWCF CAPITAL INVESTMENT PROGRAM PROJECTS

1. Purpose. The purpose of this policy is to:

a. Clarify techniques and procedures for analysis and documentation of capital projects with investment costs less than \$100,000 as well as those of \$100,000 or more. Capital projects are those that are expected to meet the capitalization criteria specified in paragraph D.6. of this chapter.

b. Outline the process for capital project economic analysis and cost comparison justifications in support of the Planning, Programming, Budgeting, and Execution System.

2. Related Materials

a. OMB Circular A-94, “Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs,” October 1992.

b. DoDI 7041.3, “Economic Analysis and Program Evaluation for Resource Management,” October 1972.

c. DoD 7000.14-R, “Department of Defense Financial Management Regulation,” Volume 2B, Chapter 9, May 1994.

d. OUSD(C) Inflation Indices issued annually to DoD Components for use in preparation of PPBES submissions and cost estimates.

3. Analytical Justification - General Policy

a. Capital Investment Program projects within the DWCF are essential in maintaining efficient and effective business operations. It is imperative that expenditure of funds for these projects be justified based on sound analytical evaluation to ensure competitive operations reflected in a structure supporting the lowest price to the customer.

b. Funding requests for projects in the four Capital Investment Program categories identified in paragraph D. of this chapter shall be justified and supported by a formal, pre-investment analysis. Either an economic analysis or cost comparison as discussed in this

document is required to justify investment projects for Capital Budget submissions, reprogramming requests, or substitution of projects. The scope of analysis shall be tailored depending on dollar value of the project as outlined in paragraphs F.5. and F.6. below. These analyses shall be maintained by the originating office of the DoD Component as project documentation support for the Capital Budget submission as well as program execution. The Capital Investment Program categories are:

- (1) Capital Equipment (Other than ADPE & Telecommunications)
- (2) ADPE and Telecommunications Equipment
- (3) Software
- (4) Minor Construction (less than \$300,000)

c. Capital Investment Program projects in the four investment categories above shall also be identified according to one of the following primary reasons for justifying the investment:

(1) Replacement. Unsafe, beyond economical repair, or inoperative/unusable assets.

(2) Productivity. Improved efficiency (savings) or effectiveness.

(3) New Mission. Required new capability or capacity that cannot be met with current equipment or facilities.

(4) Environmental. Investment for environmental or hazardous waste reduction including regulatory agency mandated requirements.

4. Analytical Justification - General Policy Exemptions. There are two instances for which an exemption applies to the requirement to perform a pre-investment analysis. In both instances, an exception justification statement shall be prepared documenting the requirement or authority for the exemption claimed. Exemption statements shall be validated as would a pre-investment analysis and approved through DoD Component review channels. The two instances are:

a. Environmental, hazardous waste reduction, or regulatory agency (state, local, or Federal) mandated requirements; also includes directed action by higher DoD or Component authority which precludes choice among alternatives.

b. DoD instruction or directive waive the requirement (e.g., equipment age or condition replacement criteria).

5. Analytical Justification - Investment Projects under \$100,000

a. Investment projects estimated to cost under \$100,000 shall be justified using an abbreviated approach which compares the costs of feasible alternatives to the status quo. The cost comparison initially shall be prepared in constant base year dollars and shall present a differential cost display by year for up to a six year evaluation period beginning with the budget year for which investment funds are requested.

b. Documentation for a cost comparison shall describe the functional process performed; define the need/requirement/objective; identify workload projections; address feasible alternatives; present total costs attributed to each alternative and the differential costs/monetary benefits expected in constant and current dollars over the six year evaluation period; provide significant assumptions, constraints, estimating methods, rationale and data sources.

c. The following economic indicators (defined in paragraph F.7. below) shall be developed and summarized in the Cost Comparison: Payback and Benefit to Investment Ratio (BIR). These values shall be used in conjunction with the above documentation elements in determining the recommended project alternative when there is more than one under evaluation. Payback shall be the primary indicator from cost comparisons to rank order projects up to \$100,000 within the investment categories of each business area.

d. Addendum 2 presents a recommended outline and format for the cost comparison reflecting the above documentation elements. Complete documentation for a cost comparison may be 3-5 pages although this may vary depending on the number of alternatives considered and complexity of the project.

6. Analytical Justification - Investment Projects \$100,000 or More

a. Investment projects estimated to cost \$100,000 or more shall be justified using conventional, analytical techniques pertaining to economic analysis for evaluation of alternatives relative to the current situation or status quo. The economic analysis shall be prepared on a net present value (NPV) basis and shall comply with applicable DoD or Component guidance as well as functional program guidance. The economic analysis initially shall be prepared in constant base year dollars and shall present a differential cost display by year over the project's expected economic life beginning with the budget year for which investment funds are requested. The expected economic life used in estimating the costs and benefits of an alternative shown on the Economic Analysis Format shall be the same as the depreciation period for that asset as shown in paragraph D.7.f. above.

b. Documentation shall describe the functional process performed; define the need/requirement/objective; present and explain workload projections; identify feasible alternatives; present total costs and the differential costs/monetary benefits in constant, discounted, and current dollars over the expected economic life of the project; highlight NPV of the alternatives; present estimating methods/relationships, and data sources; identify significant constraints, assumptions and variables; treat sensitivity and uncertainty of key parameters; and address all other quantifiable benefits as well as any intangible benefits influencing the recommended course of action. Quantifiable benefits are all outputs/results achieved in return for investment dollars associated with an alternative. Numerical values such as dollars saved or physical/performance attributes are measures of quantifiable benefits. Intangible benefits are qualitative in nature such as improved morale or quality of life considerations.

c. The standard criterion used in evaluating investment alternatives based on economic principles is NPV which is the difference between the discounted present value of monetary benefits and the discounted present value of investment costs. In addition to NPV, economic indicators for “Payback” and “Benefit to Investment Ratio (BIR),” (defined in paragraph F.7. below) shall be developed and summarized in the economic analysis. These values shall be used in conjunction with the above documentation elements in determining the recommended project alternative when there is more than one under evaluation. NPV and BIR shall be the primary financial measures from economic analyses used to rank order projects of \$100,000 or more within the investment categories of each business area.

d. Addendum 3 contains a recommended outline and format for the economic analysis reflecting the above documentation elements. Automated economic programs and reports may be used if the programs provide reports comparable to the requirements of Addendum 3.

e. With regard to automated information systems investments and functional program evaluations within the DoD, the pre-investment analysis process shall comply with the requirements identified below. Care shall be exercised in consideration of the type and program responsibility for the respective economic analyses to assure efficient preparation and submission to the appropriate business area and Capital Investment Program category.

(1) Major Automated Information System Review Council (MAISRC) Systems. MAISRC Systems shall comply with economic analysis preparation, display, milestone, and dollar threshold requirements for automated information systems governed by DoDD 8120.1, “Life-Cycle Management of Automated Information Systems,” DoDI 8120.2, “Automated Information Systems Life-Cycle Management Process, Review, and Milestone Approval Procedures,” DoDI 7920.4, “Baselining of Automated Information Systems,” and DoD 7920.2-M, “Automated Information system Life-Cycle Management Manual.”

(2) Functional Economic Analyses. Functional Economic Analyses (FEAs) shall comply with DoD economic analysis requirements in support of functional program business cases governed by DoD Series 8000 Instructions and authorities referenced in paragraph F.2. of this chapter.

f. All automated information systems investments shall be supported by an economic analysis for each phase of the acquisition review and approval process prescribed by DoD and Component regulatory authority.

7. Economic Indicators

a. The economic indicators as defined and discussed below shall be used in both cost comparisons and economic analyses for Capital Investment Program projects.

(1) Payback. Used to compare the period of time, in years, necessary for an alternative to repay its investment cost from monetary benefits expected; also used as a value to compare and rank order competing projects; computed using current dollars. Calculated and presented as whole and fractional part of a year (i.e., 2.73 years).

(2) Benefit to Investment Ratio (BIR). Used to compare project alternatives in terms of all expected monetary benefits inclusive of whole and partial manpower productivity savings resulting from increased efficiency and other cost avoidances achieved over the total project life under evaluation; also used as a value to compare other projects. Calculated, using discounted constant dollars, as an index value and rounded to the second decimal place (e.g.,

3.74). The value must be greater than one to be cost beneficial; the larger the ratio the greater the advantage.

b. The computation of BIR shall be limited for Capital Investment Program projects to a six year evaluation period for cost comparisons and a project's expected economic life for economic analyses. If the expected economic life of a proposed capital asset/alternative is less than the six year period for a cost comparison, the evaluation period shall be shortened to match. Additionally, the cost comparison BIR shall be computed using constant dollars only since discounting does not apply to the cost comparison analysis.

c. Some projects may not generate sufficient expected monetary benefits to payback within the specified evaluation period for cost comparisons. In these instances, annual benefits shall be extrapolated beyond the evaluation period for purposes of determining the Payback.

d. Automated information systems economic analyses, in accordance with paragraph F.6.e. above, also include a "Savings to Investment Ratio (SIR)" economic indicator. Savings to Investment Ratio (SIR) is used to compare project alternatives in terms of hard savings expected (i.e., funds no longer required in the budget and program out years) relative to the investment cost of each alternative over the total project life under evaluation; also used as a value to compare other projects; computed using discounted constant dollars.

8. Operations Versus Investment Cost Elements for Analysis of DWCF Capital Investment Program Projects. The following elements are illustrative of those considered in estimating the costs associated with a Capital Investment Program project for either a cost comparison or economic analysis. These cost elements may be augmented as needed. Operations cost elements apply to the status quo and all feasible alternatives while investment cost elements apply only to the alternatives. Operations costs should be estimated on a total cost basis including all direct and indirect labor, applicable overhead, and general and administrative costs. Operations costs may include non-recurring (one time) as well as recurring costs.

OPERATIONS COSTS

Labor

- Civilian Personnel
- Military Personnel

Material

Maintenance and Repair

Consumable Supplies

Lease/Rent

Utilities

Other

INVESTMENT COSTS

Acquisition

Transportation *

Installation *

Testing *

Training *

Other

* May be applicable if not included in acquisition cost.

9. Budget Formulation and Execution

a. Capital Investment Program project justifications shall be used in support of program planning as well the budget formulation process. Initial supporting, pre-investment analyses shall be completed approximately eighteen months prior to the year of execution and then reassessed approximately six months before year of execution. In addition to budget formulation, either an economic analysis or cost comparison shall be used to support a project substitution or to accomplish a reprogramming request.

b. DoD Component business areas are encouraged to rank order all projects within Capital Investment Program category (as shown in paragraph F.3.b. above) based on NPV and the economic indicators discussed above as well as other essential criteria (e.g., exemptions) deemed appropriate by Component activities. The prioritization process shall facilitate timely substitution of worthy projects for those no longer justified and subsequently drop out. The priority sequencing process shall result in a listing that is periodically updated as Component or business area priorities change.

c. Capital Investment Program projects shall be submitted in accordance with Volume 2B, Chapter 9 of this Regulation.

(1) Investment projects of \$500,000 or more shall be supported by a summary of the results of the economic analysis including an explanatory narrative of the need/requirement, workload projections, feasible alternatives, significant assumptions, estimating methods, data sources, NPV, Payback, BIR, dollar benefits expected, and other support of the recommended project. An appropriate exemption justification statement shall be included as applicable in lieu of economic analysis summary results.

(2) Investment projects of \$1.0 million or more shall have a copy of their supporting economic analysis submitted to the DoD Component for review and retention.

10. Post-Investment Analyses. Annually, each activity within the DWCF shall prepare post-investment analyses for ten percent of the number of capital investment projects, but not less than five projects, that were completed during the previous fiscal year and had been justified wholly or partially on the basis of economic considerations (e.g., productivity improvements). The projects selected for post-investment analysis shall be a representative sample of the completed investment projects. The format and technique for each post-investment analysis shall be similar to the cost comparison or economic analysis used for the project justification. The post-investment analyses shall be retained for ready review for five

ACCOUNTING ILLUSTRATION

INVESTED CAPITAL USED

A. GENERAL

1. Revenue and expenses associated with reimbursable orders must be matched and reported on the Statement of Operations. Likewise, the use of assets, as measured by depreciation of those assets, which are not included in reimbursement rates is a financing source against which expenses must be matched and reported on the Statement of Operations. To accomplish this requirement, general ledger account 5790 has been established.

2. Assets used by the Defense Working Capital Fund (DWCF) may be made available in one of two ways:

a. Assets may be purchased by use of DWCF (97X4930) resources. Assets purchased through use of DWCF resources are accounted for as an exchange of assets (DWCF cash for the acquired asset) as demonstrated by the following accounting entry:

Dr 1730 Buildings	\$60,000	
Dr 1740 Other Structures and Facilities	\$48,000	
Cr 1012.2 Funds Disbursed -		
Capital Program - DWCF		\$108,000

b. Assets may be acquired through resources other than those made available to the DWCF for its use. Assets of this type (generally buildings, structures, and facilities financed by a Military Construction appropriation and assets financed by a Procurement appropriation for mobilization requirements) are accounted for as an increase to the applicable asset account and a corresponding increase in equity as demonstrated by the following accounting entry (and more fully explained in this Addendum):

Dr 1730 Buildings	\$240,000	
Dr 1740 Other Structures and Facilities	\$120,000	
Cr 3211.2 Assets Capitalized		\$360,000

Account 5790, "Invested Capital Used," a credit balance account, is a general ledger account established to match, as a financing source, the current period depreciation of assets acquired through resources other than those made available to the DWCF (97X4930) for its use.

B. ILLUSTRATION. The following simplified illustration provides an explanation, in accounting terms, of the accounting necessary to properly recognize revenue and associated expense applicable to invested capital.

1. Identification of Expense to Financing Source. Assets used by the DWCF may be financed through use of DWCF resources (97X4930) or they may be financed by other sources

and donated or otherwise made available to the DWCF for its use. The assets acquired must be identified to their original financing source so that the depreciation of those assets can be properly identified.

Account	Account	Account	Account
1730	1739	1740	1749
Financing Source	Monthly Buildings	Other Structures Depreciation	Monthly and Facilities Depreciation
97X4930	\$ 60,000	\$ 250	\$ 48,000
Donation/Other	\$240,000	\$1,000	\$120,000
Total	\$300,000	\$1,250	\$168,000
			\$ 700

2. Recognition of Accrued Expenses

Dr 6126 Depreciation of Real Property	\$1,500	
Cr 1739 Accumulated Depreciation on Buildings		\$1,000
Cr 1749 Accumulated Depreciation on Other Structures and Facilities		\$ 500

To record monthly real property depreciation on donated/Military Construction financed assets. (As shown in preceding table, \$1,500 [\$1,000 + \$500] of the depreciation is applicable to assets used by the DWCF but financed by resources other than those available to the DWCF.)

Dr 6126 Depreciation of Real Property	\$ 450	
Cr 1739 Accumulated Depreciation on Buildings		\$ 250
Cr 1749 Accumulated Depreciation on Other Structures and Facilities		\$ 200

To record monthly real property depreciation on assets acquired with DWCF financial resources.

3. Reduction of Invested Capital (Account 3211.2). The amounts to be recorded in account 5790 shall be equal to the amount of depreciation/ depletion/amortization expenses recorded in the 6100 series of accounts that are applicable to assets used by the DWCF but financed by resources other than those available to the DWCF. In this illustration, those expenses total \$1,500.

The following entry illustrates the use of this account:

Dr 3211.2 Assets Capitalized	\$1,500	
Cr 5790 Invested Capital Used		\$1,500

To record, as a financing source, the monthly benefit received from the use of non-DWCF assets. The benefit received shall be equal to the depreciation expense recorded for those assets during the same period.

4. CLOSING OF ACCOUNTS AT FISCAL YEAR END

Dr 3321 Net Results of Operations - DWCF \$ 23,400
 Cr 6126 Depreciation of Real Property \$ 23,400

Dr 5790 Invested Capital Used \$ 18,000
 Cr 3321 Net Results of Operations-DWCF \$ 18,000

Dr 1012.2 Funds Disbursed -
 Capital Program - DWCF \$108,000
 Cr 3211.4 Net Treasury Balance-DWCF \$108,000

5. NOTES:

- a. Account 5790, "Invested Capital Used," should equal the amount of depreciation expenses recorded for assets used by the DWCF but financed by resources other than those available to the DWCF.
- b. The balance in account 5790 should be reported within the "Revenues and Financing Sources" section of the Statement of Operations on the line for "Other Revenue and Financing Sources."
- c. The accrued depreciation expense should be reported within the "Expenses" section of the Statement of Operations on the line for "Depreciation and Amortization."
- d. The Journal Voucher used to generate the third entry in paragraph B.4. above to close general ledger account 1012.2, "Funds Disbursed - Capital Program - DWCF" to general ledger account 3211.4 shall be retained indefinitely. A copy of the Journal Voucher shall be forwarded to the Defense Finance and Accounting Service-Cleveland Center. Upon receipt of the Journal Voucher from a DWCF activity, the Defense Finance and Accounting Service-Cleveland Center shall make the following accounting entry:

Dr 3211.4 Net Treasury Balance-DWCF \$ 108,000
 Cr 1013.2 Funds with Treasury -
 Capital Program - DWCF \$108,000

DEFENSE WORKING CAPITAL FUND
CAPITAL INVESTMENT PROGRAM
PROJECT JUSTIFICATION AND ANALYSIS
(For Capital Investment Projects less than \$100,000)

1. Project Title:
2. Functional Process/Project Description:
3. Need/Requirement/Objective Statement:
4. Workload Projections:
5. Alternative(s):
 - Status Quo
 - Feasible Alternatives
 - Alternative A
 - Alternative B (if applicable)
6. Cost and Benefits Display (see following page)
7. Summary Information for All Alternatives: (Numbers in parentheses are keyed to the Cost Comparison Format on the following page)

Alt. A Alt. B

Total Benefits (Current Dollars) (6) _____
Investment Cost (Current Dollars) (7) _____
Payback (Yrs)) _____
BIR (8)/(9) _____
Productivity Benefits: (Workyears) _____
8. Source and Derivation of Costs: (Provide complete explanation, rationale, and backup to support the project and ensure validation.)
9. Assumptions and Constraints: (Identify significant assumptions and constraints.)
10. Conclusions and Recommendation:

COST COMPARISON FORMAT

Constant Dollars
 (Base Year FY96)
 Operations Costs
 Benefits
 Status Quo
 Alternative A
 (Differential Costs)
 (2)
 (3)
 (4) = (2) - (3)
 Current Dollars
 (Inflated)
 Benefits
 (Differential Costs)
 (5) = (4) x Infl. Fac.

Evaluation
 Period*
 (1)

FY96
 FY97
 FY98
 FY99
 FY00
 FY01
 Residual
 Value
 Total
 XXX
 \$ XXX
 \$ XXX (8)
 \$ XXX (6)
Investment Cost
 \$ XXX (7)
Investment Cost
 \$ XXX (9)
Project Total
 \$ XXX
 *Limited to 6 years

Repeat Cost Comparison Format for each alternative.

DEFENSE WORKING CAPITAL FUND

CAPITAL INVESTMENT PROGRAM

PROJECT JUSTIFICATION AND ANALYSIS (For Capital Investment Projects of \$100,000 or more)

1. Project Title:
2. Functional Process/Project Description:
3. Need/Requirement/Objective Statement:
4. Workload Projections:
5. Alternative(s):
 - Status Quo
 - Feasible Alternatives
 - Alternative A
 - Alternative B (if applicable)
6. Cost and Benefits Display (see following page)
7. Summary Information for All Alternatives: (Numbers in parentheses are keyed to the Cost Comparison Format on the following page)

Alt. A Alt. B

Total Benefits (Current Dollars) (7) _____
Investment Cost (Current Dollars) (8) _____
Payback (Yrs)) _____
BIR (11)/(12) _____
Productivity Benefits: (Workyears) _____
8. Source and Derivation of Costs: (Provide complete explanation, rationale, and backup to support the project and ensure validation.)
9. Assumptions and Constraints: (Identify significant assumptions and constraints.)
10. Sensitivity/Uncertainty: (Analyze the implications of potential changes to key parameters on the costs and monetary benefits for each alternative.)
11. Other Quantifiable Benefits (non-monetary) and Intangible Benefits: (Identify and discuss other quantifiable and intangible benefits that may help to distinguish between alternatives with similar economic indicator values.)
12. Conclusions and Recommendation:

ECONOMIC ANALYSIS FORMAT

Constant Dollars
(Base Year FY96)

Benefits
Status Quo

Alternative A

(Differential Costs)
(2)

Evaluation
Period*
(1)

FY96

FY97

FY98

FY99

FY00

FY01

FY02

FY03

FY04

FY05

Residual
Value

TOTAL

Net Present Value
(Discounted Dollars)

Constant Dollars
(Inflated)

Benefits

Benefits

(Differential Costs)

(Differential Costs)

Operations Costs

(3)

(4) = (2) - (3)

(5) = (4) x Disc. Fac

(5) = (4) x Disc. Fac

\$ XXX

\$ XXX

\$ XXX

\$ XXX

\$ XXX

\$ XXX (9)

\$ XXX (11)

\$ XXX (7)

Investment Cost

\$ XXX (10)

Project Total

\$ XXX

Investment Cost

Investment Cost

\$ XXX (12)

\$ XXX (8)

*Number of years based on projected economic life of the capital asset (5 - 20 years depending upon the asset's depreciation period)

Repeat Economic Analysis Format for each alternative.